AMENDMENTS TO THE CLAIMS

Please amend claims 1, 5, 8, 12 and 14, and cancel claims 15-16 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for analyzing motion between two images, comprising:

generating a single channel image for each of two input images according to a function that measures, for each pixel, occurrence of a desired characteristic, other than luminance alone, in the input images at each pixel location to provide a single value for ~~an~~ each output pixel in the single channel image from a range of values that represent a likelihood of the occurrence of the desired characteristic; and

computing an estimate of motion of the desired characteristic between the two images using a gradient-based method and using the single channel images generated for the two input images and using as a constraint that a total of the desired characteristic is constant from one image to a next image.

2. (Original) The method of claim 1, wherein the desired characteristic is edge magnitude.

3. (Original) The method of claim 1, wherein the desired characteristic is proximity to a color.

4. (Original) The method of claim 1, further comprising:

processing the input images according to the estimate of motion.

5. (Currently Amended) The method of claim 4, further comprising:

using the estimate of motion to interpolate between the two images ~~generate several images from the first image to the second image~~.

6. (Original) The method of claim 5, wherein the desired characteristic is edge magnitude.

7. (Original) The method of claim 5, wherein the desired characteristic is proximity to a color.

8. (Currently Amended) An apparatus for analyzing motion between two images, comprising:

means for generating a single channel image for each of two input images according to a function that measures, for each pixel, occurrence of a desired characteristic, other than luminance alone, in the input images at each pixel location to provide a single value for ~~an~~ each output pixel in the single channel image from a range of values that represent a likelihood of the occurrence of the desired characteristic; and

means for computing an estimate of motion of the desired characteristic between the two images using a gradient-based method and using the single channel images generated for the two input images and using as a constraint that a total of the desired characteristic is constant from one image to a next image.

9. (Original) The apparatus of claim 8, wherein the desired characteristic is edge magnitude.

10. (Original) The apparatus of claim 8, wherein the desired characteristic is proximity to a color.

11. (Original) The apparatus of claim 8, further comprising:
means for processing the input images according to the estimate of motion.

12. (Currently Amended) The apparatus of claim 11, further comprising:

means for generating several images interpolate between the two images ~~from the first image to the second image using the estimate of motion~~.

13. (Original) The apparatus of claim 11, wherein the desired characteristic is edge magnitude.

14. (Currently Amended) The apparatus of claim 11 ~~8~~, wherein the desired characteristic is proximity to a color.

15-16. Cancelled.